ABSTRACT OF THE DISCLOSURE

An infrared imaging apparatus is used for carrying out shading correction of picture data obtained as a result of an image-taking process using a camera head including an optical system, a plurality of detector elements and a container for accommodating the detector elements. The apparatus includes a first correction unit for creating corrected-sensitivity picture data by correction of shading components caused by the optical system to produce uniform scene components included in the picture data obtained as a result of an image-taking process of a uniform scene; a storage unit for storing a housing response profile for correcting a housing-shading component caused by infrared rays radiated by the optical system and the container for each of the detector elements; and a second correction unit for creating corrected-housing-shading picture data by correction of housing-shading components based on the correctedsensitivity picture data and the housing response profile for each of the detector elements.